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The Maine Department of Transportation (MaineDOT) is pleased to present its *Six-Year Transportation Improvement Plan* (Six-Year Plan) for fiscal years 2004-2009. It discusses how MaineDOT intends to apply its Resource Allocation Policy to select capital projects for all modes of transportation for inclusion in its next three *Biennial Transportation Programs* (BTIPs). Projects and initiatives included in the Six-Year Plan assume state and federal funding over the next six years consistent with funding in the BTIP for fiscal years 2002-2003.

This Plan continues MaineDOT's commitment to complete improvements to Maine's rural arterial highway system, continues an emphasis on improvement to Maine's structurally and functionally deficient bridges, and continues the policy to preserve past investments in Maine's overall transportation infrastructure. This Plan also continues investments in Maine's passenger and freight transportation systems. These investments will improve and expand the State's multimodal and intermodal system elements and provide transportation users with a range of alternatives from which to choose when making travel related decisions.

In preparation for this Plan, MaineDOT contacted every Maine municipality, Metropolitan Planning Organization (MPO), Indian Nations and Tribes and County Commissioners for unorganized territories to request their input on regional and statewide transportation improvement priorities. MaineDOT, in conjunction with the seven Regional Transportation Advisory Committees (RTACs), held seven public meetings on a draft document throughout Maine and accepted comments on the draft plan for 30 days. A synopsis of comments is included in Appendix F.

MaineDOT looks forward to working with all interested parties in accomplishing the goals of this Plan.

Sincerely,

Carl A. Croce  
Acting Commissioner



PRINTED ON RECYCLED PAPER

*Six-Year*  
*Transportation Improvement Plan*  
*Fiscal Years 2004 - 2009*

Prepared by  
Maine Department of Transportation  
Bureau of Planning

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## 1.0 Introduction

The Maine Department of Transportation's (MaineDOT) *Six-Year Transportation Improvement Plan* for Fiscal Years 2004-2009 (Six-Year Plan) lists the major transportation policy initiatives and capital improvement projects MaineDOT expects to include within the next three *Biennial Transportation Improvement Programs* (BTIPs). In support of MaineDOT's biennial budget request, the Fiscal Years 2004-2005 BTIP will be submitted to the Legislature and broadly distributed in early 2003. The Six-Year Plan links MaineDOT's policy based Twenty-Year Transportation Plan to the project based and fiscally constrained BTIP.

The Six-Year Plan allows MaineDOT to effectively manage its planning, project development and financial resources. Other state agencies and business interests may use it to assist in the development of public and private investment strategies. The Six-Year Plan also provides municipalities and utility companies with the opportunity to plan for anticipated improvements.

MaineDOT updates the Six-Year Plan every two years to reflect the resources it expects to have available over the fiscal year period covered by each Six-Year Plan. A project's inclusion in a Six-Year Plan signifies MaineDOT's intention to fund it within a six-year time period. Due to factors associated with project development including public involvement, environmental analysis, preliminary and final design, in addition to actual funds available from federal and state sources, actual construction may not occur within this six-year period.

In preparation for this Six-Year Plan, Maine municipalities, Maine Indian Nations and Tribes, and County Commissioners for unorganized territories were asked to provide MaineDOT with a list of their transportation improvement needs. MaineDOT also supported the four federally designated Metropolitan Planning Organizations' (MPOs) transportation planning and capital improvement decision-making. The seven Regional Transportation Advisory Committees (RTACs) were asked to indicate major changes in their regions that may have affected the priorities recommended by the RTACs and MaineDOT in the development of the prior Six-Year Plan.

MaineDOT also supported the development of Regional Advisory Reports in the seven RTAC regions to obtain input on regional transportation priorities. In December 2002, MaineDOT in conjunction with the RTACs, held seven public meetings throughout the state on the draft Six-Year Plan. MaineDOT also accepted written comments on the draft document for 30 days. Public comments are summarized in Appendix F. Additionally, decisions for projects and initiatives included in this Six-Year Plan were based on the following Resource Allocation Policy:

### **MaineDOT Resource Allocation Policy**

This policy establishes general and flexible decision-making guidance on how MaineDOT should effectively spend its resources to advance its mission and goals as far as possible.

#### **1. Meet system preservation needs.**

Good management of a large system of capital facilities like the state's transportation system requires a continuing investment in system preservation.

#### **2. Invest in system modernization needs for all modes.**

When system preservation needs have been addressed, MaineDOT will invest its resources in the significant number of transportation infrastructure modernization needs. A safe and efficient transportation system is key to the state's economic growth.

#### **3. Invest in transportation system management and travel demand management alternatives.**

In today's economic and environmental climate, the demand for transportation mobility must be addressed, to the extent possible, through actions that maximize the efficiency of our existing transportation infrastructure.

#### **4. Invest in all modes of transportation.**

MaineDOT must continue its efforts to provide a "seamless" interconnection between all modes, both for passengers and freight. Mobility options such as trains, buses, air and ferries can be efficient, environmentally sensitive and cost-effective modal choices.

#### **5. Target limited resources for new capacity to the highest priorities.**

Funding for new capacity projects is extremely limited. Only those projects supporting state and regional transportation goals and strategies and those that have demonstrated merit and strong public support will be considered.

Table 1.1		
Twenty-Year Transportation Plan Goals		Fiscal Years 2004-2009 Six-Year Transportation Improvement Plan
Economic Vitality	Access to Global Markets	-Reconstructs over 170 arterial miles throughout the state facilitating safe and efficient movement of people and freight along state and regional trade corridors
		-Reconstructs over 300 miles of major collectors along priority corridors linking communities and businesses to arterial highways and eliminating the need to post roads against heavy loads during the spring thaw
		-Continues multimodal investments in Portland and Bangor as International Gateway Communities
		-Invests in car free transportation systems that increase Maine's competitiveness in global tourism markets
		-Preserves and upgrades key rail corridors that allow Maine shippers enhanced access to the North American rails system and port connections on both coasts
		-Constructs both passenger and freight intermodal facilities
		-Enhances the seamless flow of goods through Portland, Searsport and Eastport and increases access and mobility at small waterside facilities
		-Provides for new Visitor Information Centers offering visitors an introduction to Maine, its unique regions, its historical, cultural and natural heritage, and to provide information about destinations and attractions, recreational opportunities and accommodations
Integrated Decision-Making	Environmental Protection	-Continues to develop ISO14001-based environmental management systems throughout MaineDOT, supporting the state's Clean Government Initiative by focusing on pollution prevention, material recycling, and compliance with all environmental laws
		-Develops transportation-land use strategies to support state goals of improved air and water quality and energy conservation
		-Supports scenic byways, community landscape and historic enhancement initiatives and calls for a defined policy regarding federal context sensitive solutions to support state goals of tourism and sustainable community development
		-Based upon feedback at public meetings held throughout Maine
	Public Involvement	-Substantial outreach to public interest groups, transportation stakeholders and public agencies
		-Includes prioritized policy advice from each Regional Transportation Advisory Committee (RTAC) and considers an RTAC ranking process for listed highway projects
	Inter-Governmental Coordination	-Based on feedback from Maine municipalities, Metropolitan Planning Organizations, Indian Nations and tribes, County Commissioners, state agencies and the federal government
		-Enables local administration of transportation projects in a partnership between MaineDOT and municipalities
System Management	Preservation	-Conforms with state and federal legislation and goals
		-MaineDOT will partner with state, local and federal agencies to assess and address critical infrastructure security needs
	Efficiency	-Preserves Maine's existing bridge and highway network through the Bridge and Pavement Management Programs by applying the right treatment at the most appropriate time in bridge and highway life cycles
		-Utilizes transportation planning and technology to ensure optimum investments to improve safety and address system deficiencies
	Safety	-Continues the steady increase in transportation safety over the past ten years by recognizing that safety is a key consideration in every MaineDOT project
		-Provides for an extensive public safety media campaign and intersection improvements, guardrail upgrades and railroad crossing improvements

MaineDOT's 2000-2020 Twenty-Year Transportation Plan is available at: [www.state.me.us/mdot/planning/bureauweb/20yr.pdf](http://www.state.me.us/mdot/planning/bureauweb/20yr.pdf)

Maine's transportation system is a key factor in the health and growth of Maine's economy. Maine citizens, business and industry rely upon it to conduct everyday life. Table 1.1 illustrates initiatives in this Six-Year Plan that support MaineDOT's long-term transportation goals.

Section Two discusses recent changes in state legislation that offer an opportunity for linking state transportation funding to inflation and explains how ongoing deliberations at the federal level may offer new opportunities for Maine.

Section Three includes a snapshot of prioritized policy advice from Regional Advisory Report summaries prepared by the seven Regional Transportation Advisory Committees (RTACs). Complete RTAC Regional Advisory Reports and summaries are available at [www.state.me.us/mdot/planning/planningdiv/rars.htm](http://www.state.me.us/mdot/planning/planningdiv/rars.htm).

Section Four discusses Maine's highway assets and MaineDOT's mandate to rebuild the state's rural arterial highway system. As illustrated in Table 1.2,

there remains a total of 235 unbuilt rural arterials, or 11% of the state's total rural arterial network. Table 1.3 illustrates that MaineDOT intends to program approximately 173 rural arterial miles or up to 58 arterial miles each biennium for reconstruction, which should enable MaineDOT to program all rural arterials for reconstruction over the next four BTIPs.

This Six-Year Plan continues MaineDOT's commitment to arterial highways, which carry the majority of the state's traffic. Over the past four years, MaineDOT has programmed 95 miles of rural arterial highway for reconstruction. Specific highway and bridge capital improvement projects are listed in Appendix A.

It is important to note that specific highway projects included in the Six-Year Plan are limited to the improvement of unbuilt highways, usually roads constructed pre-1950 that do not meet modern design standards. Although other highway projects such as resurfacing, intersection improvements and ditching will be addressed in the next three BTIPs, specific projects are not included in the Six-Year Plan.

Table 1.2 Statewide Total: Unbuilt Highway Mileage and Estimated Cost by Division													
		Principal Arterial			Minor Arterial			Major and Urban Collectors			Total		
Division	Area Type	Miles	%	Cost (\$M)	Miles	%	Cost (\$M)	Miles	%	Cost (\$M)	Miles	%	Cost (\$M)
			Total			Total			Total		Total		
1	Urban	0.0	0.0%	\$0.00	1.4	0.6%	\$3.11	10.8	0.6%	\$4.86	12.2	0.6%	\$7.97
	Rural	12.9	14.4%	\$18.58	29.8	13.8%	\$37.55	136.6	7.5%	\$61.47	179.3	8.5%	\$117.59
2	Urban	1.7	1.9%	\$4.25	0.0	0.0%	\$0.00	4.6	0.3%	\$2.07	6.3	0.3%	\$6.32
	Rural	14.3	16.0%	\$20.59	26.5	12.3%	\$33.39	233.9	12.9%	\$105.26	274.7	13.0%	\$159.24
3	Urban	0.0	0.0%	\$0.00	0.0	0.0%	\$0.00	29.7	1.6%	\$13.37	29.7	1.4%	\$13.37
	Rural	0.0	0.0%	\$0.00	33.2	15.4%	\$41.83	251.7	13.9%	\$113.27	284.9	13.4%	\$155.10
4	Urban	0.0	0.0%	\$0.00	0.5	0.2%	\$1.11	19.8	1.1%	\$8.91	20.3	1.0%	\$10.02
	Rural	7.3	8.1%	\$10.51	4.1	1.9%	\$5.17	230.8	12.7%	\$103.86	242.2	11.4%	\$119.54
5	Urban	0.5	0.6%	\$1.25	0.0	0.0%	\$0.00	34.5	1.9%	\$15.53	35.0	1.7%	\$16.78
	Rural	12.3	13.7%	\$17.71	0.5	0.2%	\$0.63	245.1	13.5%	\$110.30	257.9	12.2%	\$128.64
6	Urban	4.1	4.6%	\$10.25	33.5	15.5%	\$74.37	70.5	3.9%	\$31.73	108.1	5.1%	\$116.35
	Rural	12.6	14.1%	\$18.14	31.1	14.4%	\$39.19	217.1	12.0%	\$97.70	260.8	12.3%	\$155.03
7	Urban	1.1	1.2%	\$2.75	28.0	13.0%	\$62.16	37.0	2.0%	\$16.65	66.1	3.1%	\$81.56
	Rural	22.8	25.4%	\$32.83	27.5	12.7%	\$34.65	291.3	16.1%	\$131.09	341.6	16.1%	\$198.57
Total	Urban	7.4	8.3%	\$18.50	63.4	29.3%	\$140.75	206.9	11.4%	\$93.11	277.7	13.1%	\$252.35
	Rural	82.2	91.7%	\$118.37	152.7	70.7%	\$192.40	1,606.5	88.6%	\$722.93	1,841.4	86.9%	\$1,033.70
Unbuilt Total		89.6			216.1			1,813.4			2,119.1		
System Total		1,348			1,324			3,743			6,415		



<b>Table 1.3</b> <b>FY2004-2009 Six-Year Plan Summary</b> <b>Proposed Highway Reconstruction Mileage by Division and Highway Classification</b>								
	Division 1	Division 2	Division 3	Division 4	Division 5	Division 6	Division 7	Total
NHS/ Principal Arterial	10.4	13.4	-	5.6	8.7	12.7	13.9	64.7
Minor Arterials	21.7	16.7	24.8	3.1	0.5	19.6	22.1	108.5
Urban Arterials	1.4	1.7	-	0.5	0.5	1.1	7.2	12.4
Major Collectors	28	48	52	48	51	45.0	60.0	332
<b>Total</b>	<b>61.5</b>	<b>79.8</b>	<b>76.8</b>	<b>57.2</b>	<b>60.7</b>	<b>78.4</b>	<b>103.2</b>	<b>517.6</b>

Table 1.2 also shows the remaining unbuilt major collector highways. Approximately 49% or over 1,600 major collector miles remain unbuilt. As discussed in Section Four, MaineDOT intends to rebuild approximately 330 rural major collector highway miles or 111 miles per biennium. Over the past four years, MaineDOT has programmed 212 rural major collector highway miles for reconstruction.

Section Four also discusses urban and village center transportation investments in Maine, which will affect initiatives to improve not only the 71 miles of unbuilt urban arterial highways and 207 miles of unbuilt urban collector highways but also programs that provide for operational and safety improvements.

Section Five discusses the condition of Maine's bridge assets and recommends appropriate levels of investment over the next six years. Approximately 99% of Interstate bridges have a federal sufficiency rating of 60 or greater, which means they are unlikely to need capital improvements for at least 10 years, other than paint or wearing surface work. Average federal sufficiency ratings for structures on other arterial and collector highways range between 75-78%.

Section Six discusses MaineDOT's passenger transportation initiatives including *Explore Maine*, MaineDOT's plan to expand upon successes in serving travelers without cars by providing more travel choices to Maine's residents and visitors. From 1994-2000, ridership on ferries, airplanes and buses grew by 20%, illustrating that the state's passenger transportation investment decisions are successful and must provide more opportunity to

meet the rising demands. Specific passenger transportation projects are listed in Appendix B.

Section Seven discusses freight initiatives. MaineDOT participates in partnerships with freight carriers and providers in order to support the development of a free-flowing intermodal freight system to provide choices between modes. These efforts will be particularly important over the next six years. Currently over 90% of freight in Maine is transported by truck compared to approximately 65% in the early 1990's. Providing modal choices reduces costs for shippers by encouraging competition, reducing traffic congestion and improving air quality.

Section Eight highlights MaineDOT's initiatives to improve Maine's environment while simultaneously improving transportation. Transportation investments are leading to improved fish habitat, improved air quality, reductions in hazardous waste, cleaner lakes and streams and livable communities.

Section Nine details the different ways MaineDOT will continue to preserve and enhance transportation mobility. These actions range from infrastructure improvements, such as building new highways and relieving bottlenecks, to supporting multiple transportation modes for people and freight, to advocating local planning and state policies such as access management to promote higher density mixed use land development patterns.

Section Ten discusses the relationship between transportation and state and national security and how MaineDOT will continue to work with agencies at the local, county, state and federal level.



Finally, Section Eleven highlights programs that demonstrate MaineDOT's commitment to long-term economic development. For example, MaineDOT's support for the Regional Signage Program and involvement with Visitor Information Centers support Maine's tourism industry. MaineDOT's partnership with the Department of Economic and Community Development (DECD) where DECD operates but MaineDOT owns and maintains Visitor Information Centers demonstrates interagency coordination.

## 2.0 Transportation Funding

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This section is intended to focus on Maine's Highway Fund and on federal funding in general and is not intended to be an all-inclusive listing of transportation funding sources. Maine's dedicated Highway Fund and federal transportation funds represent the principal sources of public spending on highway and bridge needs in Maine. Both are derived from the proceeds of motor fuel taxes, motor vehicle registration, license fees and other transportation user fees. Bond financing is also an important source of funding for MaineDOT's capital program and has recently averaged \$41 million per biennium for highways and bridges. Capital funding for non-highway modes of transportation are also supported by federal funds and state General Funds, usually in the form of General Fund bonding.

### 2.1 Maine's Highway Fund.

The Highway Fund has not kept pace with inflation for the past decade, creating a substantial challenge when facing an aging infrastructure. The Highway Fund has grown at roughly 1% per year while inflation has averaged nearly 3% per year over the past decade. This is not surprising given that the fuel tax is a flat fee and does not change with the price of fuel, unlike other taxes that increase with inflation. In order to meet critical needs, the past four Highway Fund biennial budgets have relied upon one-time, stopgap revenues to fill the Highway Fund structural gap. One-time funds have generally been provided from surplus General Fund revenues and General Fund bonding. This has helped to reduce Highway Fund debt which had increased to where 17% of MaineDOT's budget was

devoted to debt payments. Currently, debt to revenue ratio in the Highway Fund is still significantly higher than the General Fund.

The 120<sup>th</sup> Maine Legislature enacted Public Law 2001 (PL 2001, c. 688), "An Act to Promote the Fiscal Sustainability of the Highway Fund" which provides a long-term solution to the funding dilemma. This law indexes the fuel tax to inflation based on the national Consumer Price Index (CPI), and puts it on par with most other taxes and fees in Maine which adjust to inflation.

After the first year, which on July 2003 adjusts fuel taxes cumulatively to CPI since the last fuel tax adjustment in 1999, future increases are expected to be approximately a ½ cent annually. However, no fuel tax increase is guaranteed or automatic. PL 2001 c. 688 requires MaineDOT to submit legislation during the First Regular Session of each Legislature repealing the indexing adjustment. Therefore, biennially the Legislature has the opportunity to:

- ☒ Repeal indexing and replace it with alternative revenues,
- ☒ Vote against the repeal, or
- ☒ Cut projects and programs.

PL 2001 c 688 provides the funding necessary for highway improvements throughout Maine and projects identified in the Six-Year Plan. *If indexing is repealed, and alternative funding is not provided, projects in the Six-Year Plan and in the FY04-FY05 BTIP will have to be eliminated.* Given that nearly 10% of MaineDOT's funding from the state Highway Fund is returned to municipalities through the Urban-Rural Initiative Program, this program would also be affected.

### 2.2 Federal Transportation Funding

Federal funding is a major financing component of projects in the Six-Year Plan and BTIP, providing as much as 80% of project funding. Two significant federal authorizations are the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and AIR-21. Under TEA-21, Maine citizens pay fuel taxes and user fees to the federal government which are then returned to Maine traditionally through a broad six-year authorization bill passed by Congress. Annually, thereafter, Congress must act to release specific levels of funding through action on a transportation budget within the framework of the

six-year authorization. Therefore, funds returned can vary annually depending upon Congressional considerations such as current revenue receipts, the economy, competing need and many other factors.

Federal fuel taxes and fees are deposited in the Federal Highway Trust Fund and are then returned to Maine through a complex framework of programs and funding formulas. The Federal Highway Trust Fund provides funding for highway, transit and certain intermodal programs. Currently, Congress is considering a successor bill to TEA-21 which expires on September 30, 2003. The outcome of these deliberations will dictate the level of funding available to deliver projects in the Six-Year Plan and BTIP. MaineDOT's goal is to increase Maine's returns from the Federal Highway Trust Fund so that it is at least equivalent to Maine taxpayer's contributions.

In addition to receiving federal funding through formulas, states may receive discretionary funds allocated through both congressional earmarks and competitive grant processes. These amounts vary each year. Although there is strong competition for resources across all federal discretionary spending programs, MaineDOT will continue to work with its Congressional delegation for earmarks and seek funding through grants. However, the condition of the U.S. economy, inflation, national security and various other factors may result in a significantly different federal surface-transportation funding scenario for Maine by the time the legislation is enacted.

### **2.3 Uncertainty of Project Costs**

Maine's climate, size, location and the volatility of the costs of certain construction materials make predicting the future costs for construction projects difficult. Maine's climate results in a comparatively short construction season, which affects the costs of certain projects. Furthermore, for certain transportation projects, the cost of transporting construction materials becomes a significant portion of the total project costs. Lastly, the price of liquid asphalt, a petroleum byproduct used in highway pavements is extremely volatile. Unforeseen shifts in the global petroleum market can lead to considerable price increases.

## **3.0 RTAC Regional Priorities and Advice**

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In 1991, Maine citizens enacted the Sensible Transportation Policy Act (STPA) through referendum. One of STPA's components directed MaineDOT to develop rules to systematically incorporate public input into the transportation planning process. As part of the rule making process, MaineDOT formed seven Regional Transportation Advisory Committees (RTACs), each comprised of citizen members representing various public and private interests. One role of the RTACs is to provide policy advice on the priority of transportation investments within each region. Each RTAC publishes a Regional Advisory Report (RAR), which is updated every three years. MaineDOT utilizes the seven RARs in conjunction with input from the public at large, municipal officials, engineering evaluations, safety assessments and MaineDOT's Resource Allocation Policy to develop the Six-Year Plan.

As part of this Six-Year Plan, MaineDOT asked each RTAC to produce a two-page summary from their RARs consisting of a short paragraph describing each RTAC Region followed by prioritized policy advice to MaineDOT. With support from Regional Planning Commission staff, each RTAC prepared a summary, which along with the completed RARs, is available at [www.state.me.us/mdot/planning/planningdiv/rars.htm](http://www.state.me.us/mdot/planning/planningdiv/rars.htm) or may be obtained by contacting MaineDOT's Bureau of Planning at 207-624-3300. Appendix E contains more detailed advice from each RTAC such as the following issues that emerged in multiple regions:

- All RTACs advised MaineDOT to continue its commitment to a 10-year program for upgrading all unbuilt rural arterials and the 20-year goal for upgrading all unbuilt rural major collectors.
- All regions advised MaineDOT to continue access management education and outreach. Southern, central, and mid-coast regions identified corridor planning, comprehensive planning for transportation, growth management and access management as areas where MaineDOT should focus over the next six years.
- Most of the regions that border the Interstate indicated that the difference in truck weight limits

on the Interstate and state highways be eliminated with some recommending 80,000 pound limits for state highways and others recommending 100,000 pound limits for the Interstate. One region suggested a reduction in the truck weight limits for U.S. Route 1.

- All regions felt rail corridors within the state should be preserved and MaineDOT should continue to support the expanded use of rail for freight and passenger service. Four regions suggested continued support for the Industrial Rail Access Program (IRAP).
- All regions advised some investment or expansion of MaineDOT's intermodal facilities.
- Regions 1, 2 and 7 were the strongest proponents of investments in airport infrastructure and most Regions suggested strengthening intermodal links to airports within the state.
- All regions advised MaineDOT to continue to plan for and to invest in pedestrian and bicycle facilities including sidewalks, separated bike pedestrian paths and highway shoulders.
- Regions 1, 2 and 7 advised continued support for enhanced highway connections to Maine's seaports.
- All regions suggested investment in or support for public transit. Several regions suggested better connections between rural communities, suburbs and service centers. Three regions suggested expansion of Maine's marine highway.
- Air quality was the biggest environmental issue discussed by the RTACs. Regions 2, 5, 6 and 7 suggested that the MaineDOT take actions to improve air quality. Suggestions included streamlining air quality projects, promoting environmentally friendly modes of transportation and encouraging the use of alternative fuels.
- Four Regions recommend that MaineDOT invest in transportation for economic growth.

MaineDOT regularly meets with the seven RTACs and uses the advice to develop, evaluate and confirm its statewide and regional initiatives and programs. Prior to the adoption of the final Six-Year Plan, each RTAC, in conjunction with the MaineDOT, hosted a public meeting on the draft Six-Year Plan. These and other comments on the draft Six-Year Plan are summarized in Appendix F.

## 4.0 Highway Projects

There are a total of 22,700 miles of public roads in Maine. MaineDOT is responsible for more than 8,300 miles of these roads, which have been summarized into two distinct categories - **built** and **unbuilt**. A **built highway** is one that has been built to modern design standards, including adequate sight distance, structural capacity and safety. An **unbuilt highway**, also referred to as backlog, is usually a road constructed pre-1950 and does not meet modern design standards.

### 4.1 Highway Functional Classifications

Functional classification is the process by which public streets and highways are grouped into classes according to the character of service they provide. In classifying highway and street network by function, access, mobility, posted speed and traffic volume are among factors that must be considered. The hierarchy of the functional systems consists of principal arterials, minor arterials, collectors and local roads. Generally, the higher order systems carry higher volumes of traffic. To some extent, highway design criteria (i.e. lane and shoulder widths, minimum stopping distance, and minimum horizontal curvature) are governed by a highway's functional classification. For the National Highway System, which is comprised of principal arterial highways, design is governed by the American Association of State Highway and Transportation Officials (AASHTO) standards. For all other functionally classified roadways, MaineDOT has flexibility in applying design standards. Such flexibility is directly related to traffic volume.

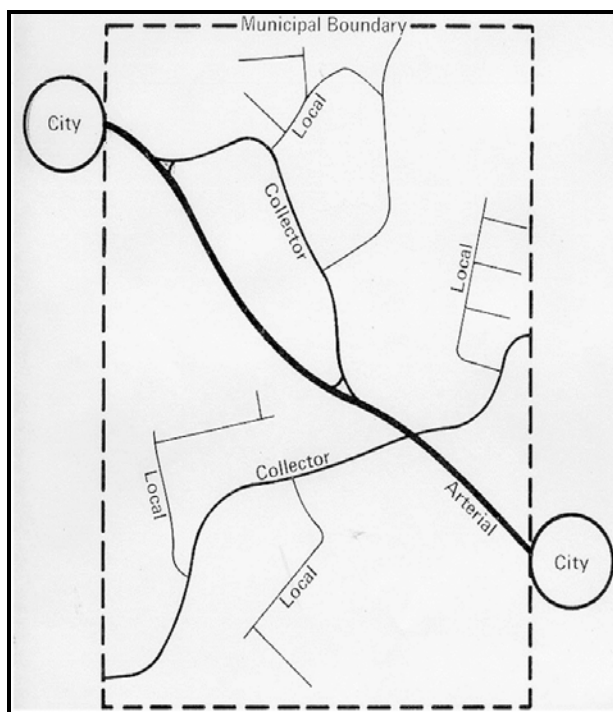
Highway functional classification and associated standards are directly related to the cost of building or reconstructing highways. For example, it may cost twice as much to construct an arterial highway mile than it does to reconstruct a major collector mile. Furthermore, due to factors such as utilities, right-of-way costs and drainage, urban reconstruction projects usually cost considerably more than rural reconstruction projects.

Based on the amount of flexibility MaineDOT has in highway design and construction, MaineDOT applies innovative construction methods to use resources cost-effectively. These treatments range

from foamed asphalt, an overlay of new pavement placed over the roadway to provide a new riding surface, to a number of others where MaineDOT reclaims pavement of substandard highways to incorporate them into the construction materials. These methods save money and protect natural resources.

**Arterial Highways** provide for substantial statewide or interstate through travel for large traffic volumes at generally relatively high speed with minimum interference. Depending on their location and function, arterials are categorized as Rural or Urban and as Principal or Minor.

**Major Collector Highways** are outside federal urban areas and serve important intracounty travel corridors that connect consolidated schools, shipping points, important agricultural areas, etc. with local roads.



**National Highway System (NHS)** includes the Interstate Highway System as well as other principal arterials important to the nation's economy, defense, and mobility. The NHS was developed by the Federal Department of Transportation (USDOT) in cooperation with the states, local officials and Metropolitan Planning Organizations (MPOs).

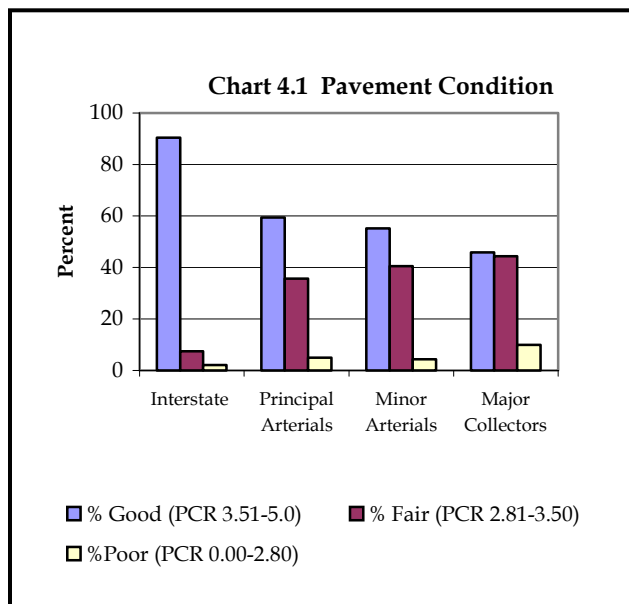
**Urban Collectors** are collector highways inside federal urban areas.

**Minor Collectors** provide service outside urban areas and link local roads with arterial and major collector highways.

**Local Roads** principally provide access to adjacent land and provide service to travelers over relatively short distances.

#### 4.2 Pavement Preservation

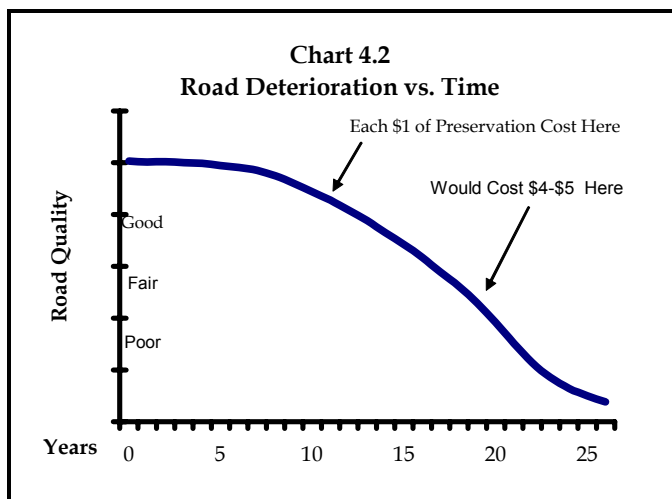
Over 65% of arterial and major collector highways currently meet modern standards or have been funded for improvements. These highways represent a significant investment and would cost nearly \$3 billion to replace. In accordance with the top priority of the aforementioned Resource Allocation Policy, MaineDOT will continue to invest in system preservation prior to rebuilding roads, adding capacity to existing roads or constructing new ones.



MaineDOT has adopted a new approach to the preservation of pavement, which will result in significant cost-savings over the long-term. This approach is referred to as pavement preventive maintenance (PPM). PPM may be defined as applying the right treatment to the right pavement at the right time. The PPM philosophy is to apply lighter, less expensive treatments earlier in a

pavement's life, and more frequently thereafter to maintain the pavement in optimum condition.

As indicated in Chart 4.2, pavement generally deteriorates very slowly in the first few years after placement, but begins to deteriorate rapidly as it ages. MaineDOT's PPM consists of cost-effective treatments, such as crack sealing, microsurfacing, light and medium resurfacing. While treating the worst sections of highway first may appear logical, overall pavement conditions decline quicker under a "worst first" scenario. This is because it costs considerably more to treat pavement in poor condition. PPM enables more miles of roadway to be



treated at a lower cost per mile. Since PPM expands the treatment options available to MaineDOT, particularly lower cost options applied earlier in the pavement's lifecycle, MaineDOT expects to treat more miles over the next six years than in the past. Pavement preservation needs and projects are developed through MaineDOT's ongoing pavement management program. Variations in traffic and environmental factors affect the rate of pavement deterioration. Therefore, it is not logical to identify pavement preservation projects over a six-year period since needs and priorities change. Projects are selected for each BTIP based on the severity of the roadway and pavement conditions at the time the BTIP is developed.

Over the next six years, MaineDOT will also continue to make investments to improve and maintain the Interstate system. These actions will range from resurfacing, reclamation and interchange

improvements to shoulder work including shoulder rumble strips. Although specific Interstate projects and project scopes of work are not included in the Six-Year Plan, they will be included in each of the next three BTIPs.

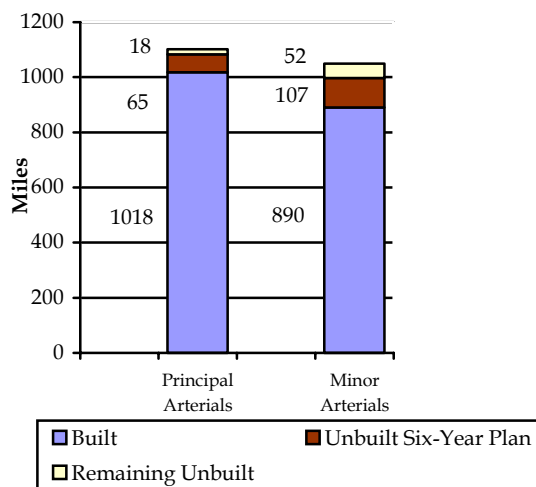
In addition to PPM activities on built highways, MaineDOT treats up to 750 miles of unbuilt state roads per biennium with "maintenance mulch." This treatment includes approximately 5/8" of asphalt mix, has a life up to seven years and serves as a holding action until unbuilt highways are reconstructed. Since maintenance mulch costs approximately \$18,000 per mile compared to \$450,000-\$2.5 million to reconstruct a highway mile depending upon its functional classification, this activity will continue to be a cost-effective temporary treatment until funding becomes available to reconstruct all unbuilt highways in Maine. As MaineDOT strives to improve approximately 58 miles of unbuilt rural arterial highway miles and 111 unbuilt major collector highway miles each biennium, the number of miles treated with maintenance mulch will decrease as the total number of unbuilt major collectors and rural arterials is decreased.

### 4.3 Rural Arterial Program

This Six-Year Plan proposes the reconstruction of 173 miles of unbuilt rural arterial highway listed in Appendix A. This proposed arterial highway investment reflects MaineDOT's commitment to Maine's long-term economic vitality, because as indicated in Chart 4.4, approximately 62% of vehicle miles traveled on public roads in Maine are on arterial highways although they represent just 13% of the miles of public road in Maine. This proposed rural arterial investment is also consistent with a 1999 Legislative mandate that requires MaineDOT to submit biennial budgets to reconstruct all unbuilt sections of the rural arterial highway system by 2009.<sup>1</sup>

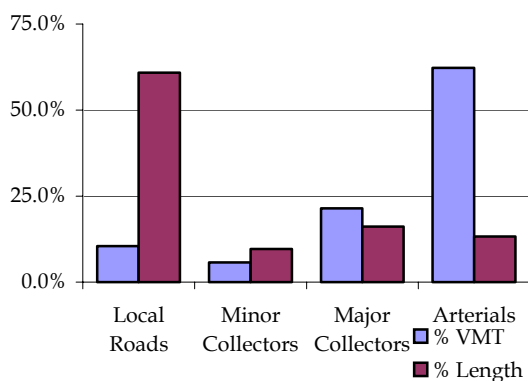
<sup>1</sup> Public Law 1999, Chapter 737, Part C enacted by the 119<sup>th</sup> Legislature.

**Chart 4.3**  
**Miles of Built vs. Unbuilt Rural Arterials, including NHS**



Rural arterials included in this Six-Year Plan were selected based on input from municipalities, the public, seven RTACs and other factors, such as each segment's condition, average annual daily traffic, accident history, role within a transportation corridor and cost-effectiveness. The Six-Year Plan distributes the 173 miles of rural arterial reconstruction equitably by Division.

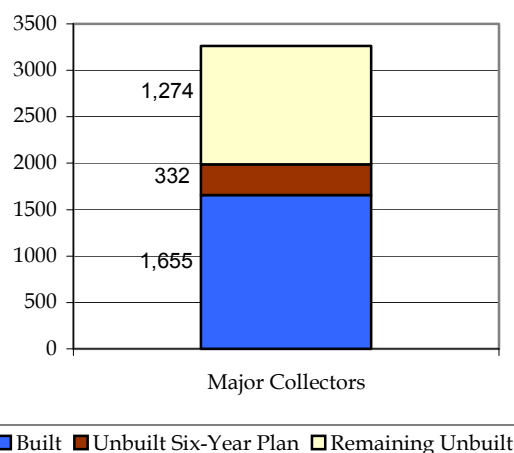
**Chart 4.4**  
**Vehicle Miles Traveled vs. Length**



For example, if 12% of the unbuilt rural arterials exist in one division, MaineDOT attempts to allocate 12% of the total rural arterial reconstruction miles in the Six-Year Plan to this Division. This policy not only distributes resources fairly throughout the state, but also ensures that rural arterials in each Division will be built to modern design standards at approximately the same time.

#### 4.4 Major Collector Program

**Chart 4.5**  
**Miles Built vs. Unbuilt Rural Major Collectors**



Of the 8,300 miles of roadway administered and maintained by MaineDOT, approximately 3,250 are classified as rural major collector highways. Of the rural major collector highway system, over 1,600 miles have been identified as unbuilt. The anticipated fiscal constraint over the next six years will limit the program to approximately 111 miles of major collector highways statewide per biennium or about 55 miles annually, which is consistent with the FY02-FY03 BTIP. Therefore, it is expected that only 332 miles out of greater than 500 unbuilt rural major collector miles listed in Appendix A of the Six-Year Plan will be completed during this six year cycle. This expanded list, which shows a greater number of project miles than will be funded over the next three biennium, allows MaineDOT more flexibility to match construction projects with paving projects along specific corridors and deliver a geographically balanced program within each region. Following



completion of the legislatively mandated arterial program, resources will be shifted to place more emphasis on finishing improvements to major collectors.

Major collector improvement projects included in this Six-Year Plan were selected after a thorough public involvement process. As part of the development of the FY02-FY07 Six-Year Plan, the seven RTACs, with Regional Planning Commission assistance, ranked the major collectors within their regions. Rankings developed for the FY02-FY07 Six-Year Plan were evaluated on a corridor basis. A corridor-based approach is more cost-effective and supportive of Maine's transportation goals compared to an investment in individual highway segments.

The RTACs were asked to consider the following criteria in their ranking process -- economic impact, local priority, potential for regional system linkages, consistency with local comprehensive plans, consistency with Regional Advisory Reports and corridor committee priorities. Since the RTACs undertook a comprehensive ranking process for the previous Six-Year Plan, MaineDOT did not repeat a ranking process. However, MaineDOT asked each RTAC to indicate any major changes in their regions, which may have affected the ranking processes undertaken two years prior.

#### 4.5 Minor Collector Program/ Rural Road Initiative

There are over 2,200 miles of minor collectors in Maine spread throughout almost 400 municipalities. Municipalities share maintenance responsibilities with the state for these roads. Capital improvements require a 33% municipal match. MaineDOT routinely contacts municipalities with minor collectors to solicit their interest in the Rural Road Initiative (RRI), which is MaineDOT's program for improving minor collectors. Projects for municipalities that have indicated an interest in participating in the RRI are included in Appendix A. Since municipalities have a major role in determining the location of an improvement project, state-municipal partnerships ensure public investments on minor collector highways that are most important to local communities.

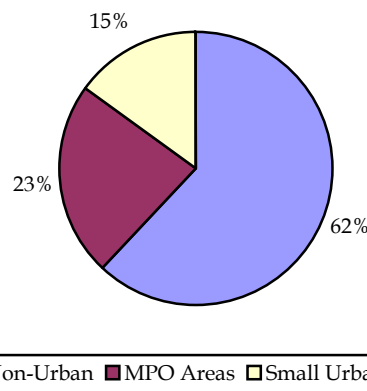
#### 4.6 Urban and Village Center Investments

In the greater Bangor, Kittery, Lewiston-Auburn and Portland areas, the federally designated

Metropolitan Planning Organizations (MPO) are responsible for transportation planning and capital improvement decision-making. Each MPO includes representatives from its member communities and transportation providers. A list of specific, although not necessarily comprehensive, MPO projects is included in Appendix D.

In addition to working with the MPO's, MaineDOT supports planning that promotes livable communities and projects that lead to investments in community centers. While most Six-Year Plan projects are limited to the improvement of unbuilt highways, which is consistent with MaineDOT's legal mandate, MaineDOT recognizes that urban highway needs tend to focus more on capacity, operational and safety improvements than on rebuilding structurally and geometrically deficient highways. To the extent that funding is available, these projects will be evaluated for capital programs in the six-year period covered by this plan. Investments in federally designated MPO and small urban areas represented 38% of MaineDOT's previous BTIP as indicated in Chart 4.6. In the next six years, MaineDOT will also propose specific policies that support the vitality of urban

**Chart 4.6**  
**MPO and Small Urban Area**  
**Investments FY 2002-2003**



communities and village centers. These initiatives will enable MaineDOT to assist communities with planning and implementing projects that result in fewer vehicle miles traveled. For example, MaineDOT may assist with transportation

improvements related to projects that support mixed land uses such as the Great American Neighborhood proposed in the Dunstan Village area of Scarborough. Since these developments enable individuals to accomplish many tasks with fewer vehicle trips, these investments help relieve congestion.

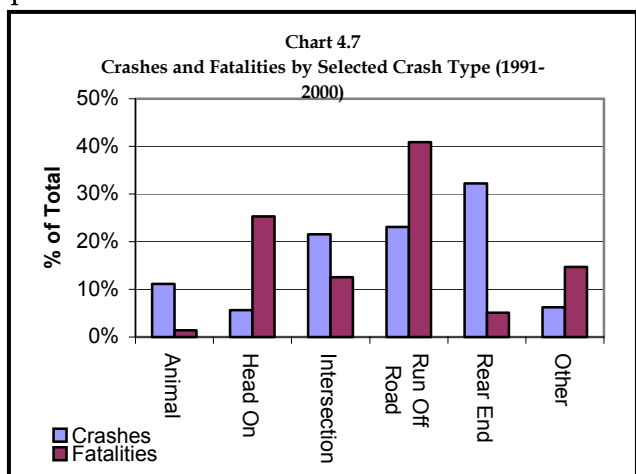
Communities will be able to make themselves more competitive for transportation funding by planning for growth in ways that recognizes their role within a broader region and the affects their local actions can have upon the state highway system. For example, specific community actions such as land use tools that manage growth along a highway corridor versus policies that promote strip development could leverage transportation improvements or amenities as part of transportation improvement projects.

#### 4.7 Safety Improvements

Safety is a key consideration in every MaineDOT project. MaineDOT focus on a variety of measures to improve transportation safety including:

- Vehicle safety improvements
- Education programs
- Law enforcement
- Infrastructure improvements.

In addition to recognizing the importance of safety in every MaineDOT Project, Maine's Highway Safety Improvement Program is dedicated to improving transportation safety in Maine. It provides approximately \$4.7 million per biennium to address roadside safety hazards and \$2.0 million per biennium to improve railroad grade crossings at public roads.



MaineDOT continually evaluates crash data and potential safety improvements. This review system provides flexibility and better demand response to safety concerns. As a result, priorities continue to change. Therefore, a listing of specific safety projects is not appropriate for the Six-Year Plan. MaineDOT will continue its programs to address roadside hazards and improve railroad crossing at public roads while proceeding with the following safety programs that have been initiated to address these and other areas of concern, including:

- Work Zone Safety Awareness Week activities
- Revised Utility Pole Location Policy
- Revised Design Standards
- Guardrail Improvement Program
- Multi-agency efforts to increase commercial vehicle safety and reduce crashes involving large animals
- Innovative warning system at non-signalized intersections.

### 5.0 Bridge Improvement Program

Maine's bridges and minor span network has changed since the previous Six-Year Plan. MaineDOT now has full responsibility for capital improvement and maintenance of the following 2,741 structures:

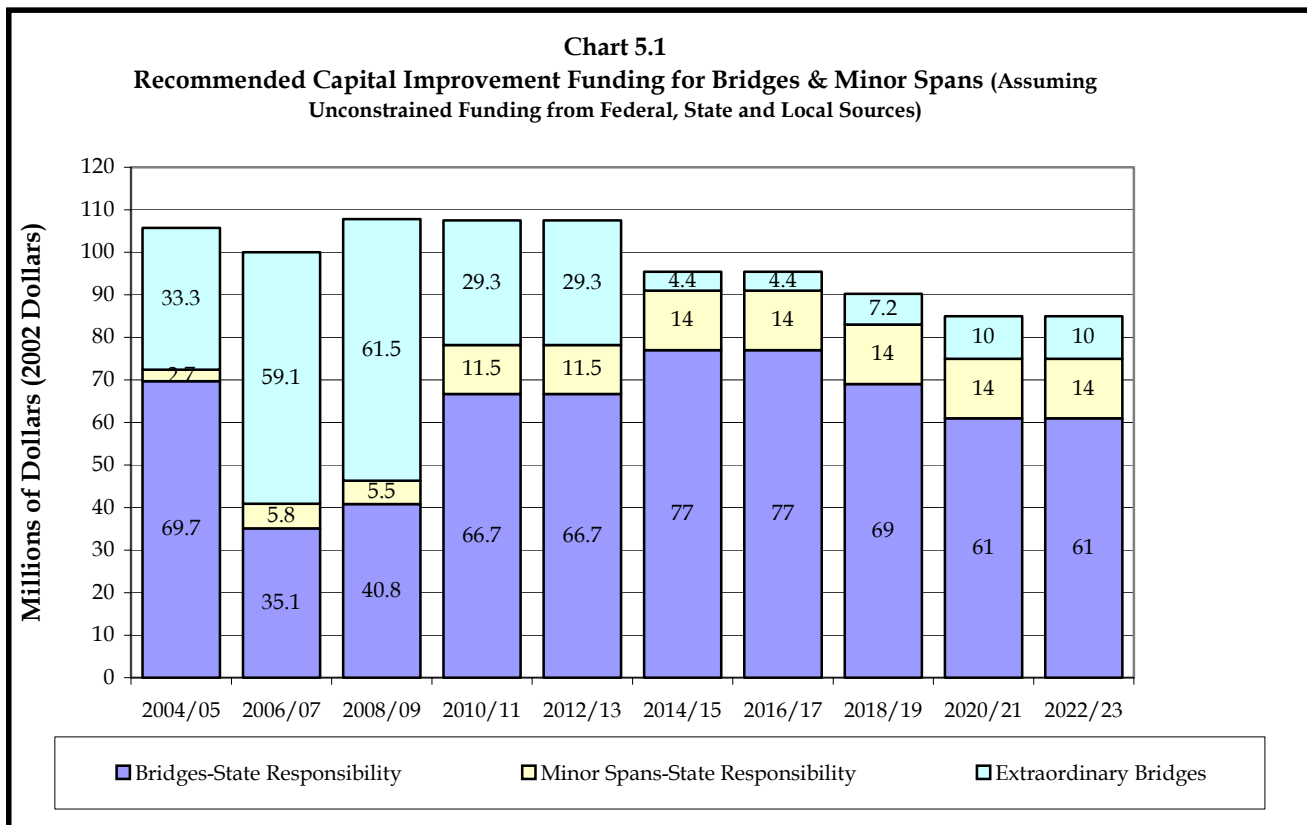
- 19 extraordinary bridges (over 250 feet in length and at least \$5 million in costs)
- 1,953 bridges (equal to or greater than 20 feet in length) and
- 769 minor spans (10 feet to 20 feet in length).

In accordance with MaineDOT's Resource Allocation Policy, maintaining the state's bridge network has been one of MaineDOT's top priorities. Ensuring safe and structurally sound bridges is essential to preserving Maine's existing transportation system because bridges are vital components of Maine roads.

Bridge and minor span adequacy may be measured using several indicators but the federal sufficiency rating is the most telling. The federal sufficiency

rating is based on a combination of four factors used to determine a number from 0 to 100 (0 is worst, 100 is best) that describes the overall sufficiency of each structure. The four factors are 1) Structural Adequacy and Safety, 2) Serviceability and Functional Obsolescence, 3) Necessity for Public Use and 4) Special Reductions (detour length, traffic safety features). MaineDOT considers structures with a federal sufficiency rating greater than 60 to be sufficient or unlikely to need capital improvements for at least 10 years, except for the possibility of paint or wearing surface work.

Chart 5.1 depicts the funding levels necessary to address the bridge, minor span and extraordinary bridge needs statewide over the next 20 years. These needs reflect the fact that many of post-depression era bridges are getting close to the end of their useful life and are in need of significant repair or replacement. The costs and timing of future improvements illustrated in the chart were determined for each structure based on a number of factors, such as inspection ratings and inventory data, and are based in part on field reviews conducted by bridge engineers and environmental scientists. The specific bridge projects included in the Six-Year Plan represent the first three columns and the time period FY2004-FY2009.



## 6.0 Passenger Transportation

MaineDOT's passenger transportation initiatives are administered by the Office of Passenger Transportation. These initiatives are focused upon *Explore Maine*, which is MaineDOT's plan to serve travelers without their cars by providing more travel choices to Maine residents and visitors. *Explore Maine* will create an integrated system of rail, marine, motor coach services and trails.

*Explore Maine* addresses MaineDOT's long-term passenger transportation goals by:

- Creating an alternative transportation system
- Reducing dependency on the private automobile
- Facilitating community development
- Supporting economic development
- Protecting and enhancing Maine's quality of life.

### 6.1 Passenger Transportation Funding

In the FY02-FY03 BTIP, investment in passenger transportation reached \$110 million. MaineDOT has been successful in using the flexibility provided in TEA-21 and AIR-21, the Federal Aviation Agency's equivalent of TEA-21 specifically focused on airports, to significantly increase funding for air, passenger rail, transit, marine, trail and transportation demand management (TDM) initiatives. This flexibility, along with ongoing support from state bond financing and Maine's

FUNDING LEVELS BY MODE (Cost in Millions)				
	98/99	00/01	02/03	
Air Transportation	23.4	24.6	38.5	
State Ferry Service	2.1	10.1	15.5	
Transit	3.2	17.7	23.8	
Intermodal	1.1	3.2	8.7	
Marine Highway	0.0	4.2	2.5	
Non-Motorized	1.9	4.6	6.6	
Rail	10.4	18.9	13.5	
Transportation Demand Management	0.8	0.4	1.2	
<b>TOTAL</b>	<b>42.9</b>	<b>83.7</b>	<b>110.3</b>	

federal delegation's successes in securing earmarks for ferry boats and transit fleet improvements, has allowed MaineDOT to meet passenger capital needs. Operating funding for passenger transportation remains a challenge because Maine's Constitution limits the use of highway funds to roads and bridges. This requires innovative approaches to funding since farebox revenues do not cover all operating expenses. Nationwide, farebox revenue recovers an average of 35% of operating costs. Maine has systems that exceed this average, which include the Downeaster (65%), the Maine State Ferry Service (50%) and the Casco Bay Island Transit District (90%). However, most passenger transportation systems must rely on local funding for operating costs because needs exceed available state and federal funding. Nevertheless, MaineDOT looks to innovative programs, such as the Urban Rural Initiative Program (URIP), to assist communities in addressing operating funding needs. However, a large funding gap remains.

FY 2001 TRANSIT OPERATING ASSISTANCE	
Local	\$4,003,000
State	\$ 545,000
FTA	\$4,814,415
<b>Total</b>	<b>\$9,362,415</b>

### 6.2 Passenger Rail

Increased movement of passengers by rail decreases fossil fuel consumption and air emissions, improves travel options for commuters and decreases highway maintenance costs. Passenger rail returned to Maine with service between Boston and Portland in December 2001. MaineDOT also funded rail improvements on the state-owned Rockland Branch from Brunswick to Rockland. In the next six years, MaineDOT will focus on expanding passenger rail services north of Portland to Brunswick.

MaineDOT will make investments to the St. Lawrence and Atlantic Railroad line to support the findings of studies that show a favorable market for passenger rail service between Portland and Montreal. Passenger rail service in this corridor would include the potential for commuter service between Auburn and Portland.

MaineDOT is also studying options for passenger services between Bangor and Trenton as part of its

efforts to reduce congestion along the Route 1A corridor and in Acadia National Park. Options include rail, on-road buses and dedicated busways.

Investment in these rail corridors may include rail line upgrades, intermodal facilities, train stops or parking areas. Once improvements in these corridors are underway, MaineDOT, in conjunction with the Northern New England Passenger Rail Authority (NNEPRA), will study the feasibility of expanding passenger rail service to other parts of the state.

### 6.3 Marine

*Explore Maine* marine activities include investments in shore infrastructure in support of high speed coastal and river ferries to link coastal destinations and to provide mainland access for island communities. The success of Maine's international ferries demonstrates the opportunities for diverting highway traffic to marine services. In the next six years, MaineDOT expects to invest in Portland, Rockland, Bath, Bangor, Brewer and other waterfront communities to provide intermodal access to the marine highway.

MaineDOT will also continue to support the vitality of Maine's island communities through the Maine State Ferry Service (MSFS) and the Casco Bay Island Transit District (CBITD). The MSFS, a division of MaineDOT, serves North Haven, Vinalhaven, Islesboro, Matinicus, Swans Island and Frenchboro with year round service. MaineDOT also provides assistance to the CBITD which serves Peaks, Long, Great Diamond, Little Diamond, Chebeague and Cliff Islands in Casco Bay. Over the next six years, MaineDOT anticipates providing operating and capital assistance, replacing one MSFS and one CBITD vessel, improving piers and other facilities. MaineDOT will also continue to provide planning support to ensure the continued provision of lifeline services to Maine islands.

### 6.4 Passenger Intermodal Facilities

Passenger intermodal facilities link two or more modes of passenger transportation. In the next six years, MaineDOT proposes to build intermodal facilities at or near the airports in Auburn, Bangor and Trenton. These facilities will not only encourage other travel options besides the private automobile, but will also support economic development and may include visitor centers.

Additional facilities are being considered for the Bath and Rockland areas.

### 6.5 Bicycle and Pedestrian Three Trail Initiatives

MaineDOT supports the development of the East Coast Greenway, a national trail network linking Maine to Florida, through its three-trail initiative. In the next six years, MaineDOT will continue to invest in the following regional trails as the backbone of a statewide trail program:

- Down East Trail in Hancock and Washington Counties
- Eastern Trail in Cumberland and York Counties and
- The Mountain Division Trail in Cumberland and Oxford Counties.

MaineDOT will also continue to work with communities, the Bicycle Coalition of Maine and others to develop local trails and promote bicycling and pedestrian activities.

### 6.6 Transit

Eighteen transportation operators provide fixed route and demand response service. Fixed-route service generally operates on a schedule while demand-response service is by appointment. MaineDOT's 2002 Transit Needs Study identified potential transit routes to support *Explore Maine* by connecting Maine communities with major passenger transportation systems and hubs.

Over the next six years, MaineDOT will work with communities and transit providers to expand public transportation with a focus on linking destinations with rail and intercity bus services. This will include transit programs in the southern coast, Boothbay Peninsula, Freeport, Brunswick, Rockland and Yarmouth areas. Additionally, MaineDOT will continue to support rural and urban transit by overseeing Federal Transit Administration capital and operating programs.

### 6.7 Statewide Commuter Program

Commuter Programs in Maine need to reflect the state's rural landscape and sparse population distribution. In the next six years, MaineDOT will continue its partnership with the Maine Turnpike Authority (MTA) to implement *GoMaine*. *GoMaine* is a statewide commuter resource program that provides services and information for the

commuting public on user-friendly, cost-effective transportation options, such as, carpools, vanpools, buses, ferries, rail, bicycles, walking and telecommuting. MaineDOT and the MTA will support *GoMaine* with a marketing campaign and by proceeding with the aforementioned intermodal facilities. Additionally, MaineDOT will continue to develop Park and Ride lots at central locations, such as, rail and bus terminals, along transit routes, and where car and vanpools are feasible.

### 6.8 Maine State Aviation Systems

Maine's aviation system consists of 36 publicly owned airports, six of which are served by regularly scheduled passenger service. The air transportation industry is in a constant state of change and commercial service airports adjust services and facilities to meet current market demand. In order to preserve Maine's position in this dynamic environment, MaineDOT actively participates in New England Air Transportation Planning to connect state aviation investments to the global marketplace.

Anticipated aviation investments in the next six years will be developed as part of the Maine State Aviation Systems Plan, which is currently being updated. This plan will be developed in accordance with the following seven performance measures:

- Ability to enhance activities that improve quality of life
- Ability to provide airside and landside facilities to meet existing and future needs
- Ability to allow the general public to understand and support the role that airports play in the transportation and economic systems of Maine
- Ability to meet applicable design safety standards
- Ability to support Maine's economy
- Ability for airports to be compatible with the needs of the local communities that they serve
- Ability of Maine's airports to be accessible from both the air and the ground.

MaineDOT will also continue to assist municipalities in accomplishing local and regional goals for their airports by investing in pavement preservation, vegetation management, group master planning, business plan development, marketing, and airport self-inspection assistance programs. Lastly, MaineDOT will work in a partnership with the

Transportation Security Administration (TSA) and its new role in Maine. This may involve risk assessments for commercial service airports over the next six years and other security expenditures.

### 6.9 Technology, Safety and Security

Over the next six years, MaineDOT will continue to work with the Tri-State (Maine, New Hampshire and Vermont) Travel Information Online (TRIO) project to use Intelligent Transportation Systems (ITS) technologies to make our highways safer. ITS integrates computer, electronics, and communications technologies to increase the transportation system's safety and efficiency.

These tools enhance the traveling public's and emergency response service providers' abilities to access traffic and weather conditions. This information will be available through the 511 travel information phone number. ITS will also allow MaineDOT to monitor weather conditions in order to conduct appropriate winter maintenance.

ITS will also support *Explore Maine* by providing seamless transfers between transportation services. The future expansion of the travel information system will provide for real time tracking of public transit vehicles and interactive trip planning.

### 6.10 Promoting Alternative Transportation

MaineDOT, the MTA and the New Hampshire Department of Transportation have combined funding resources in a marketing campaign to build and sustain awareness of alternative transportation options along the Interstate 95 Corridor from Bangor to Boston. This program's goal is to encourage travelers to leave their vehicles behind and take advantage of transportation options that are convenient, comfortable and better for the environment.

MaineDOT also supports a number of educational programs aimed at children and focused upon safety, modal options and career opportunities. These programs include:

- Safe Ways to Schools - addressing walking and bicycling safety
- Kids in Transit - exploration on transit systems
- ACE Camp - exposure to aviation career opportunities
- Operation Lifesaver - education on railroad safety.



## 7.0 Freight Transportation

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MaineDOT's freight transportation initiatives are administered by the Office of Freight Transportation. These initiatives focus on promoting the efficient and safe flow of goods through improvements to highway, port and rail infrastructure.

In the next six-years, MaineDOT, in consultation with the Freight Transportation Advisory Committee, will update the Integrated Freight Plan. Plans are also underway to increase marketing efforts for the state's port and railway system. This Six-Year Plan supports the continued development of those marketing efforts and provides resources to address security needs at publicly owned rail and port facilities.

### 7.1 Freight Transportation Funding

Program planning remains a challenge because Maine's constitution limits the use of highway funds to roads and bridges, thus limiting dedicated funding for freight-related projects. Freight projects receive limited federal funding and are primarily supported through public/private partnerships and discretionary federal projects.

### 7.2 Freight Rail

Increased movement of freight by rail decreases fossil fuel consumption and air emissions, improves options for Maine shippers and decreases highway maintenance costs. MaineDOT follows a three-rail carrier strategy focusing on the Springfield Terminal Railway, Montreal, Maine and Atlantic Railway (MMA) and St. Lawrence & Atlantic Railroad. In the next six years, MaineDOT will make investments in the infrastructure of the MMA that will help preserve rail infrastructure in the northern half of the state and improve rail options for shippers served by MMA.

MaineDOT will use the Industrial Rail Access Program (IRAP), which involves up to a 50% MaineDOT share for rail-related capital improvements, to improve shipper access to and interest in railroad access. This program will help attract new business and stimulate existing business in divergent areas of Maine served by rail. Additionally, MaineDOT will focus on increasing

freight shipping opportunities on the Rockland Branch, the state-owned Lower Road rail line between Brunswick and Augusta, and all other state-owned lines as well as new acquisitions.

MaineDOT will continue its efforts to provide an efficient, cost-effective intermodal transportation system, including expansion, if necessary, at Auburn and Waterville and support of Presque Isle and development of warehouse facilities through the IRAP program.

### 7.3 Marine

MaineDOT works closely with the Maine Port Authority (Authority), a quasi-independent agency engaged in economic development and key infrastructure improvements to support state port rail systems. The Commissioner serves as Chair of the Authority's five-member Board of Directors. The Authority is currently evaluating the following projects or initiatives:

- A cruise ship terminal to relieve congestion at the city-owned pier in Bar Harbor
- A freight transload facility adjacent to the new international bridge in Calais
- Rail siding for a new lumber mill in Costigan
- Opportunities for the potential joint marketing and management of facilities in Eastport
- Rail siding for an industrial park and the development of an appropriate facility for passenger rail service in Greenville
- Construction of a 52,000 square foot warehouse in Portland
- Development of a Marine Intermodal Cargo Terminal at Mack Point in Searsport
- An effort to promote Maine to the cruise ship industry through the Cruise Maine Coalition.

MaineDOT expects to make marine infrastructure investments over the next six years through the Small Harbor Improvement Program (SHIP) and the U.S. Fish and Wildlife Service's Boating Infrastructure Grant (BIG) Program. MaineDOT has had two successful rounds of SHIP funding; \$2.5 million in 1995 and \$1.5 million in 2001. SHIP finances improvements to coastal municipal facilities, such as, piers, landings, and boat ramps resulting in 30 projects in 28 coastal municipalities and 21 projects with funds from 1995 and 2001 respectively. BIG provides funding for improvements to public marine facilities that

accommodate transient, recreational boats. Over the last three years, the BIG program has resulted in the funding of 10 municipal marine projects. Both SHIP and BIG contribute to efforts to improve the economy of coastal Maine by providing public access and promoting the Maine coast as a transient boating destination. Investment in marine facilities helps promote economic development and supports the commercial fishing industry by ensuring adequate public infrastructure for use by various interests.

MaineDOT will continue to manage the coastwide dredging program in coordination with municipalities, private industry, and state/ federal regulatory agencies. MaineDOT will also continue administering the Maine Pilots Commission.

#### **7.4 Motor Carrier**

MaineDOT chairs the Intelligent Transportation Systems/Commercial Vehicle Operations (ITS/CVO) Working Group that promotes the use of ITS technology in Maine commercial vehicle operations. The group, formed in 1996, is comprised of representatives from Maine State Government agencies involved in commercial vehicle regulation as well as a trucking industry representative. An early effort of the Working Group led to the installation of the Unified Motor Carrier Account Management System (UMCAMS) at the Maine Bureau of Motor Vehicles. This system, which consolidates motor carrier regulatory databases using the USDOT number as a common carrier identifier, assists the Maine State Police in its commercial vehicle enforcement activities.

MaineDOT will continue to increase its investment in ITS technology to support enforcement activities as well as to facilitate the orderly flow of commercial vehicle traffic to benefit motor carriers. MaineDOT has increasingly utilized weigh-in-motion technology at various locations throughout the state for enforcement and planning purposes. Planned future projects include installation of in-ground weigh scales at the Kittery-York Interstate 95 truck weighing facilities and installation of automated vehicle clearance systems at those facilities. MaineDOT will also continue to support the vehicle and scale equipment needs of the Maine State Police Commercial Vehicle Enforcement Unit.

MaineDOT will continue to support activities that help the state to comply with the national Commercial Vehicle Information Systems Network (CVISN) architecture. Relevant Maine state agencies, including MaineDOT, will be participating in technical workshops to facilitate Maine's compliance with CVISN.

MaineDOT has completed a Commercial Vehicle Service Plan to address the need for truck rest areas in the state. The Plan recommends solutions including the possibility of public-private cooperation in the installation and maintenance of commercial vehicle rest areas.

Lastly, MaineDOT will contribute to the resolution of vehicle size and weight issues such as the state versus Interstate weight limits issue, NAFTA harmonization, and the logging/gravel truck triaxle weight limit issue. MaineDOT will also further develop its Heavy Haul Truck Network planning tools.

#### **7.5 Border Crossings/Trade Corridors**

As indicated in Section 1.2, MaineDOT will continue to seek congressional earmarks and competitive grants such as the Federal Highway Administration's Borders and Corridors Program for improvements to Maine's border crossings. Improvements at Maine's Canadian border crossings help improve the flow of freight transportation and people through these bottlenecks. MaineDOT will continue to be active in international organizations, such as, the Eastern Border Transportation Coalition (EBTC) and the U.S./Canadian Federal Transportation Border Working Group. These organizations play a vital role in the development of transportation policy and programs for borders and international trade corridors.

Over the next six years, MaineDOT will seek funding for the design and construction of an access road and a new bridge in Calais for a new international border crossing. The Calais gateway is the eighth busiest commercial vehicle crossing on the Canadian border and has seen truck traffic entering into the United States double over the last 10 years. Maine will also work with U.S. Customs to identify initiatives and investments at other commercial border crossings in Jackman and

Houlton. This includes ITS-CVO initiatives and/or facility or infrastructure improvements.

### 7.6 Freight Intermodal and Storage Facilities

In the next six years, MaineDOT expects to support the construction of new warehouse facilities in Calais, Eastport, Portland and Searsport, which support the movement of products to and from Maine businesses. Where feasible, these facilities will be directly linked to rail service in order to enhance the intermodal system, improve customs clearance at borders and reduce overweight vehicles on the highways.

## 8.0 Environment

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MaineDOT's Environmental Office and staff throughout the Department integrate environmental objectives and innovations into transportation planning, construction, maintenance and operating activities. This encompasses natural, historic, cultural and scenic resources and both community and human interests. A comprehensive list of MaineDOT's environmental successes, challenges and strategies appear in the report of MaineDOT's Clean Government Initiative at [www.Maine.gov/purchase/Cleangovt/plans.htm](http://www.Maine.gov/purchase/Cleangovt/plans.htm). This report also discusses future challenges and action plans to address issues including:

- Recreational access initiative for fishing, boating and snowmobile bridges or water access at Maine highways and bridges
- Leadership, culture and training
- Minimization of natural and community resource impacts through avoidance techniques and revised design standards
- National Pollutant Discharge Elimination System (NPDES) implementation
- Salt and de-icing storage and reduced applications, including recommendations for budgetary and statutory attention
- Toxic use reduction
- Air quality, alternative fuel and energy conservation plans including traffic signal electricity conservation, diesel anti-idling and fleet management alternatives
- Environmental benefits of passenger rail, transit, and compact development patterns

- Federal Endangered Species Act Atlantic Salmon recovery plans
- ISO 14001-based Environmental Management Systems enabling MaineDOT to achieve and continuously maintain compliance with all applicable environmental regulations
- Environmental streamlining and Integrated Transportation Decisionmaking
- Recycling, especially recycling of construction material, pavement, and used tires.

As discussed in Section 1.2, existing federal legislation authorizing highway, highway safety, transit, and other surface transportation programs expires on September 30, 2003. Since new legislation may change federal direction regarding air quality, alternative fuels, modal shifts, environmental streamlining, environmental stewardship, context sensitive design, historic preservation and other issues, MaineDOT's environmental efforts will remain proactive and innovative in the next six years.

MaineDOT expects to continue environmental streamlining, cooperatively establishing realistic project development time frames among transportation and environmental agencies and work together to cooperatively adhere to them. This practice may present opportunities that affect state budgets and productivity. For example, delegation of federal environmental functions to state DOTs, state funding of review agency activities and financial support of other agency positions increase productivity by guaranteeing review of transportation projects. However, these practices will have implications on state DOT staffing and budgets.

In the next six years, MaineDOT will continue developing planning goals for the following initiatives which generally include continual evaluation and innovation, documenting successes and increases in efficiency, public input and responsiveness:

- Scenic Byways Program - provides funding for nationally selected roadway corridors to highlight the natural vistas and cultural heritage of Maine
- Community Gateways Program - provides statewide funding to support and encourage citizens and communities to create and enhance

their “sense of place” within a transportation context

- Americorps Volunteer Program - builds a volunteer base through a cooperative program statewide that links natural resource protection and transportation facilities
- Landscape & Vegetation Management - continually updates practices that provide safe roadsides for the traveling public through integrated ideas for appropriate roadside landscapes
- Surface Water Quality Protection Program - provides competitive funding to restore and protect damaged areas that threaten surface waters near existing transportation corridors
- Historic & Archaeological Initiatives - maintain an historic bridge inventory to expedite future project review, enhancement funding to restore transportation related historic structures and streamlining of historic/archeological project reviews
- Roadside Ecology: Fish Passage initiatives - collaboratively implements sound design criteria and review processes to protect fisheries and assures regulatory compliance
- Roadside Ecology: Animal habitat/ collision prevention initiatives - addresses safety concerns by researching and implementing methods to prevent crashes with animals and to allow animal crossing of highways to preserve Maine's wildlife
- Natural Resource Mitigation cooperative initiatives - establishing wetland banks; seek opportunities and provide funding for coastal and inland restoration of wetland areas.

For more information on these and other initiatives please visit [www.state.me.us/mdot/env/homepage.htm](http://www.state.me.us/mdot/env/homepage.htm) or call 207-624-3100.

## 9.0 Mobility Improvements

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MaineDOT will continue to implement policies and to make investments to improve transportation mobility. Although these investments will include projects that add capacity, constructing new highways and adding through lanes to existing highways are only two of several ways to improve mobility. Furthermore, MaineDOT is required under the Sensible Transportation Policy Act to

consider all reasonable transportation alternatives prior to adding capacity.

### 9.1 Travel Demand Management Options

Through *Explore Maine*, MaineDOT will invest in Park & Ride and bicycle and pedestrian facilities, expand transit, train and marine options and support carpooling and telecommuting. By supporting a number of different transportation alternatives to single occupancy vehicle use, *Explore Maine* seeks to improve mobility by reducing the number of vehicles on Maine highways.

### 9.2 Reduce Trip Lengths/ Frequencies

In the next six years, MaineDOT will develop policies and support transportation planning that promotes multi-use and other types of development in support of reducing vehicle miles traveled and the frequency of trips.

### 9.3 Transportation System Efficiency

Although a compilation of specific capital improvements such as variable message signs, improved signalization timing, targeted improvements to bottlenecks, truck climbing lanes, improved roadway alignments and cross-sections are not listed in this Six-Year Plan, projects will be included in future BTIPs. Additionally, MaineDOT's recently completed Heavy Haul Truck Network Study identified transportation projects that will be considered to improve the flow of freight. These projects will improve mobility by solving geometric deficiencies and enhancing traffic flow.

In addition to capital investments, MaineDOT will support policies that preserve and increase system efficiency. In the next six-years, MaineDOT will expand its access management program beyond the current driveway and entrance rules to include corridor planning and programs that allow MaineDOT to acquire access rights and develop frontage roads for shared access. By reducing accidents and conflicts at entrances and driveways along highways, access management improves mobility.

### 9.4 New Capacity and Congestion Relief

Since resources are limited for new capacity projects, projects only move forward when they support state and regional transportation goals and if they demonstrate merit and public support. In addition

to public support, MaineDOT will also expect a clear indication of the region's Legislative delegation and locally elected officials indicating they support each project's specific purpose and need. In the next six years, MaineDOT may seek funding to implement the following transportation mobility projects in accordance with the Sensible Transportation Policy Act (STPA) and the National Environmental Policy Act (NEPA):

- Gorham Bypass Congestion Relief Project
- Calais/ St. Stephen Area International Border Crossing
- Skowhegan New River Crossing
- Bangor/ Trenton Transportation Alternatives
- I-395 to Route 9 Connector Highway
- Bath Viaduct/ Removal of a Structural Deficiency
- Aroostook County North/ South Highway
- Wiscasset Congestion Relief Project.

Depending upon Legislative, public and local governmental support and available funding, MaineDOT may begin the following initiatives:

- Ellsworth Corridor Study to consider transportation alternatives to improve mobility through and around the area
- Saco Transportation Study involving enhanced linkage between Route 5, Route 112 and the Interstate
- Maine Mall to Gorham Connector
- Lewiston-Auburn Downtown Connector Study
- Colby College Transportation Study.

## 10.0 State and National Security

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Maine's highways, ports, rails and airports will continue to provide for the local, regional, national and international movement of goods and people. Due to the risks associated with this movement of millions of people and freight tonnage, MaineDOT will continue to work with agencies at the local, county, state and federal level to support security initiatives. In accordance with federal policy, MaineDOT has already performed an Infrastructure Vulnerability Assessment throughout the state. As state and federal funding becomes available, critical infrastructure security needs will be addressed. Furthermore, MaineDOT will continue to sit on the

State Emergency Response Council and coordinate security efforts with other agencies such as the U.S. Coast Guard, the Department of Homeland Security and the Department of Environmental Protection under the auspices of the Maine Emergency Management Agency.

## 11.0 Additional Transportation Programs

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This section highlights programs that demonstrate MaineDOT's commitment to long-term economic development.

### 11.1 Visitor Information Center Plan

MaineDOT owns and maintains the state's visitor centers, which are operated by the Maine Department of Economic and Community Development (DECD). Tourism results in billions of dollars in sales in Maine, generates hundreds of millions in taxes, provides for over 100,000 jobs and its role cannot be overstated. MaineDOT, in collaboration with DECD and the Maine Tourism Association, developed a plan to estimate capital needs of existing centers and identify future locations. Providing the plan is endorsed by the Legislature, funding will be sought to implement the plan.

### 11.2 Regional Tourism Signage

MaineDOT expects to continue developing a Regional Tourism Signage Program to highlight Maine's distinct regions. This approach has been implemented for Downeast Maine. Over the next six years, MaineDOT will work with stakeholders at the local and state level to develop a similar program in other areas of the state.

### 11.3 Local Administration Projects

A Locally Administered Project may be any MaineDOT project where a municipality locally administers the project's development, design and construction. These projects offer municipalities opportunities to coordinate MaineDOT projects with local initiatives, expedite projects and subsidize local forces with project funds. Projects typically administered by municipalities include bicycle, pedestrian, pavement resurfacing, traffic signals, SHIP and Park and Ride lots. MaineDOT provides

training and certification for interested municipal officials. For more information regarding these projects, please contact the Local Project Coordinator at 207-624-3329.

#### **11.4 Maine's Downtown Center**

MaineDOT plays an active role in the Maine Downtown Center. The Center was created by the Legislature to focus state investments and technical assistance in downtowns. The Six-Year Plan provides an opportunity for downtown communities and other state agencies to identify and coordinate investment opportunities that can improve the vibrancy of Maine's downtowns.

#### **11.5 Public And Recreational Access To Water Crossings And Properties Adjacent To Water**

In cooperation with the Departments of Conservation, Inland Fisheries and Wildlife, and Marine Resources, the Maine Historic Preservation Commission, the State Planning Office, and private organizations such as the Coastal Conservation Association, the Maine Municipal Association, the Maine Snowmobile Association, the Sportsman's Alliance of Maine, and Trout Unlimited, the Public and Recreational Access Committee, chaired by MaineDOT, is actively identifying MaineDOT bridge and highway projects that may provide additional safe public and recreational access opportunities. The identified projects will be scoped for access opportunities when each project is funded in an upcoming BTIP and will be incorporated into the public process accordingly.